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January 16, 2007

Date

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Beth Barnhart

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Marietta, per our telecon on January 16, 2007 at 9:30 a.m., attached please find a Request for Certificate of Correction previously faxed to Valerie Jackson on September 12, 2006. Our requests for a Certificate of Correction date back to July 22, 2005. Your assistance in expediting this matter will be appreciated. Kindly telephone Beth Barnhart at 704-945-6720 to confirm receipt of this fax/request. Thank you.

Note: Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

RE: US Patent 6,903,446 - Issued 7/6/2005 - Application Serial No. 10/045,766

September 12, 2006 Fax Cover Page and Fax Confirmation

2 pages

Request for Issue of Corrected Patent Transmittal Letter PTO/SB/44 Certificates of Correction

2 pages

3 pages

TOTAL PAGES IN TRANSMISSION including PTO/SB/97

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RE: US Patent 6,903,446 - Issued 7/6/2005 - Application Serial No. 10/045,766

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.

10/045,766

Confirmation No: 3061

Applicant

Ralph C. Tuttle, et al.

Filed

10/23/2001

TC/A.U.

2811

Examiner

Andre C. Stevenson

Docket No. : Customer No. :

5000.142 021176

For

PATTERN FOR IMPROVED VISUAL INSPECTION

OF SEMICONDUCTOR DEVICES

September 12, 2006

Certificate of Corrections Branch Commissioner for Patents Post Office Box 1450 Alexandria, VA 22313-1450

REQUEST FOR ISSUE OF CORRECTED PATENT

Sir:

Pursuant to 37 CFR §1.322(b), the Assignee of U.S. Patent No. <u>6.903,446</u> requests that the U.S. Patent and Trademark Office (PTO) issue a <u>corrected patent</u> in lieu of and with like effect as a certificate of correction with respect to the above-referenced patent. A brief explanation is listed hereafter and was previously submitted on July 22, 2005.

- 1. May 5, 2004 Applicants file an Amendment and Reply to Office Action submitting that Claims 1, 4, 5, 10, 11, 14-17, 19, 20, and 27 are in condition for allowance.
- 2. August 25, 2004 Examiner Stevenson mails a Notice of Allowability in response to the May 5, 2004, Amendment and Reply. Claims 10 and 27 are omitted.
- 3. October 13, 2004 Applicant's attorney telephones Examiner Stevenson regarding the omitted claims. Examiner Stevenson states that he will call back if there is a reason the claims were not allowed. Otherwise, he will issue a Supplemental Notice of Allowability.
- 4. October 19, 2004 Examiner Stevenson issues a Supplemental Notice of Allowability including Claims 10 and 27.

Certificate of Corrections Branch Commissioner for Patents Page 2 Confirmation No. 3061 US Patent 6,903,446

- 5. November 23, 2004 Issue Fee paid.
- 6. June 7, 2005 Patent No. 6,903,446 issues omitting the allowed subject matter claimed in Claims 10 and 27 (as amended in the May 5, 2004, Amendment and Reply to Office Action).
- 7. July 22, 2005 Applicants file a Request for Issue of Corrected Patent with a summary of items 1-6 above featured on Certificate of Correction form PTO/SB/44.
- 8. June 19, 2006 and August 31, 2006 Applicants submit Status Inquiries regarding the July 22, 2005 Request for Issue of Corrected Patent.
- 9. September 6, 2006 Valerie Jackson of the Patent Publications Office contacts the Applicants' representative and requests that Applicants submit the attached Certificate of Correction form PTO/SB/44 containing all the claims as they should appear in the patent.

Accordingly, Form PTO/SB/44 is attached and the Applicants request that the PTO issue a corrected patent listing original and amended (per the May 5, 2004, Amendment and Reply) Claims 1, 4, 5, 10, 11, 14-17, 19, 20, and 27. Because the PTO is at fault in this matter, no fee is enclosed.

Philip**/\$**umma

Registration No. 31,573

ectfully submitted.

Enclosures

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of

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO.

: 6.903,446 B2

APPLICATION NO.: 10/045,766

ISSUE DATE

: June 7, 2005 ·

INVENTOR(S)

[:] Ralph C. Tuttle, Christopher Sean Plunket, David B. Slater, Jr., Gerald H. Negley,

Thomas P. Schneider

It is certifled that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

That which is claimed is:

- 1. A labeled semiconductor material comprising:
- a surface of silicon carbide; and
- a first metal layer on portions but not all of said surface;

said metal layer forming a pattern with rotational symmetry of Cn, where n is at least 2.

- 2. A labeled semiconductor material comprising:
- a surface of silicon carbide; and
- a first metal layer on portions but not all of said surface;
- said metal layer forming a pattern with rotational symmetry of Cn where n is at least 2;
- a second metal layer on portions but not all of said surface of said semiconductor material;
- said second metal layer forming a pattern different from said first metal layer pattern;
- said second pattern having rotational symmetry of Cn where n is at least 2; and wherein each of said first and second patterns forms an X pattern.
- 3. A labeled semiconductor material comprising:
- a surface of silicon carbide; and
- a first metal layer on portions but not all of said surface;
- said metal layer forming a pattern with rotational symmetry of Cn, where n is at least 2;
- a second metal layer on portions but not all of said surface of said semiconductor material;
- said second metal layer forming a pattern different from said first metal layer pattern;
- said second pattern having rotational symmetry of Cn where n is at least 2;
- wherein each of said first and second patterns forms an X pattern; and
- wherein each X pattern further comprises a tab portion perpendicular to at least one of the arms of said X pattern.
- 4. A labeled semiconductor material according to claim 1 wherein said metal layer is selected from the group consisting of nickel, titanium, gold, platinum, vanadium, aluminum, alloys thereof and layered combinations thereof.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Summa, Allan & Addition, P.A. 11610 N. Community House Road, Suite 200 Charlotte, NC 28277

VA 22313-1450.

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page _ 2 _ of ___3_

PATENT NO.

: 6,903,446 B2

APPLICATION NO.: 10/045,766

ISSUE DATE

: June 7, 2005

INVENTOR(S)

Ralph C. Tuttle, Christopher Sean Plunket, David B. Slater, Jr., Gerald H. Negley.

Thomas P. Schneider

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- 5. A semiconductor structure comprising:
- a substrate having at least one planar face;
- a first metal layer on said planar face, and covering some, but not all of said planar face in a first predetermined geometric
- a second metal layer on said planar face, and covering some, but not all of said planar face in a second geometric pattern that is different from said first geometric pattern; and
- an epitaxial layer on the opposite side of said substrate from said planar face and said metal layers.
- 6. A semiconductor structure comprising:
- a substrate having at least one planar face;
- a first metal layer on said planar face, and covering some, but not all of said planar face in a first predetermined geometric
- a second metal layer on said planar face, and covering some, but not all of said planar face in a second geometric pattern that is different from said first geometric pattern; and
- an epitaxial layer on the opposite side of said substrate from said planar face and said metal layers; wherein said substrate and said epitaxial layer comprise a semiconductor device.
- 7. A semiconductor structure according to claim 6 wherein said device is selected from the group consisting of junction diodes, bipolar transistors, thyristors. MESFETS, JFETS, MOSFETs and photodetectors.
- 8. A semiconductor structure comprising:
- a substrate having at least one planar face;
- a first metal layer on said planar face, and covering some, but not all of said planar face in a first predetermined geometric
- a second metal layer on said planar face, and covering some, but not all of said planar face in a second geometric pattern that is different from said first geometric pattern; and
- an epitaxial layer on the opposite side of said substrate from said planar face and said metal layers;
- wherein said substrate and said epitaxial layer comprise a semiconductor device; and
- wherein said metal layers form an ohmic contact to said device.

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 6.90

: 6,903,446 B2

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APPLICATION NO.: 10/045,766

ISSUE DATÉ

: June 7, 2005

INVENTOR(S)

Ralph C. Tuttle, Christopher Sean Plunket, David B. Slater, Jr., Gerald H. Negley,

Thomas P. Schneider

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- 9. A semiconductor structure according to claim 8 wherein said substrate and said epitaxial layer are silicon carbide and said metal layers are selected from the group consisting of nickel, titanium, gold, alloys thereof, and layered combinations thereof.
- 10. A semiconductor device according to claim 8 wherein said device comprises a light emitting diode or laser diode that includes a p-n junction, and with said ohmic contact comprising a layer of nickel on said substrate and a layer selected from the group consisting of titanium-gold alloys and titanium-platinum-gold alloys on said nickel layer.
- 11. A semiconductor wafer comprising:
- a silicon carbide substrate and at least one silicon carbide epitaxial layer;
- respective primary and secondary orthogonal flats;

respective front and back planar faces;

a plurality of devices on said wafer;

each said device having a first metal layer on said planar face, and covering some, but not all of said planar face in a first predetermined geometric pattern; and

each said device having a second metal layer on said planar face, and covering some, but not all of said planar face in a second geometric pattern that is different from said first geometric pattern.

12. A semiconductor wafer according to Claim 11 wherein:

said devices comprise light emitting diodes or laser diodes that include a p-n junction; and

said metal layers comprise a layer of nickel on said substrate and a layer of a titanium- gold alloy on said nickel layer that form respective ohmic contacts to said devices.

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